Item Stock Number(s): BF120, BF150, BF150A

# IMPORTANT INSTRUCTIONS OPERATING MANUAL

### READ AND SAVE THESE INSTRUCTIONS

READ CAREFULLY BEFORE ATTEMPTING TO ASSEMBLE, INSTALL, OPERATE OR MAINTAIN THE PRODUCT DESCRIBED. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE!

### RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.

### **GENERAL SAFETY INFORMATION**

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock and injury to person, including the following:

- 1. Read all instructions before installing or using exhaust fan.
- 2. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- Before servicing or cleaning the unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-related construction.
- 5. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA) and the American Society for Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), and the local code authorities.

### **SAVE THESE INSTRUCTIONS**

### GENERAL SAFETY INFORMATION (Continued)

**CAUTION:** FOR GENERAL VENTILATING USE ONLY. DO NOT USE TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS AND VAPORS.

- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- 7. Ducted fans must always be vented to the outdoors.
- 8. This unit must be grounded.
- To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.

### **WARNING:** TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, DO NOT USE THIS FAN WITH ANY SOLID-STATE SPEED CONTROL DEVICE.

- Acceptable for use over a bathtub or shower when installed in a GFCI protected branch circuit.
- 11. NEVER place a switch where it can be reached from a tub or shower.

### **WARNING:** DO NOT USE IN KITCHENS

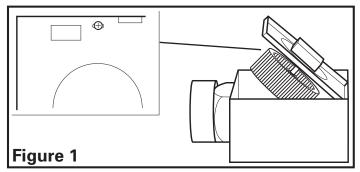
#### INSTALLATION INSTRUCTIONS

**CAUTION:** MAKE SURE POWER IS SWITCHED OFF AT SERVICE PANEL BEFORE STARTING INSTALLATION.

### **SECTION 1**

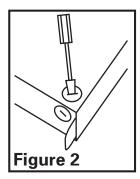
#### **Preparing the Exhaust Fan**

- Unpack fan from the carton and confirm that all pieces are present. In addition to the exhaust fan you should have:
  - 1 Grill
  - 4 Mounting Rails
  - 1 Damper Assembly (attached)
  - 1 Instruction/Safety Sheet
- Remove the fan's venturi assembly, which is secured in place with one screw through the venturi (Figure 1). This is a captive screw and will stay installed in the venturi. Keep the venturi assembly and the grill in the carton until needed so they do not get damaged or lost.



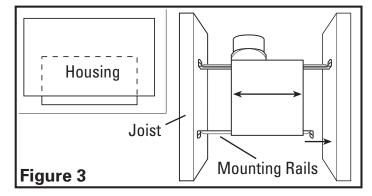
3. Choose the location for your fan. To ensure the best air and sound performance, it is recommended that the length of ducting and the number of elbows be kept to a minimum, and that insulated hard ducting be used. Larger duct sizes will reduce noise and airflow restrictions. This fan will require at least 6" of clearance in the ceiling or wall, and will mount through drywall up to 3/4" thick. The fan mounts to the joist using the mounting tabs on the side of the housing or between 16" or 24" on center joists using the 4 provided mounting rails.

 Select the most convenient electrical knockout and remove using a straightblade screw driver (Figure 2).



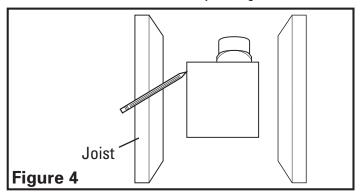
### SECTION 2 New Construction

 Install the mounting rails on the housing and position the housing next to the joist. Line up housing so that it will be flush with the finished ceiling. Secure the ends of the rails with screws or nails (not included) to the joists and slide the housing into the final position (Figure 3).



### **SECTION 3**Existing Construction

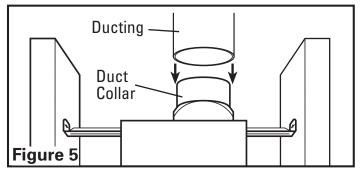
 Set housing in position between the joist and trace an outline onto the ceiling material (Figure 4). Set housing aside and cut opening, being careful not to cut or damage any electrical or other hidden utilities. Install the rails on the housing and position the housing in the previously cut hole so that it is flush with the finished ceiling. Secure the ends of the rails to the joists (Figure 3).



# SECTION 4 Ducting

### **CAUTION:** ALL DUCTING MUST COMPLY WITH LOCAL AND NATIONAL BUILDING CODES.

 Connect the ducting to the fan's duct collar (Figure 5). Secure in place using tape or screw clamp. Always duct the fan to the outside through a wall or roof cap.



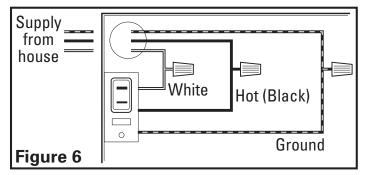
**NOTE:** If damper detaches from unit, reattach by snapping the collar back onto the unit. It is designed to only fit one way.

# **SECTION 5**Wiring

**CAUTION:** MAKE SURE POWER IS SWITCHED OFF AT SERVICE PANEL BEFORE STARTING INSTALLATION.

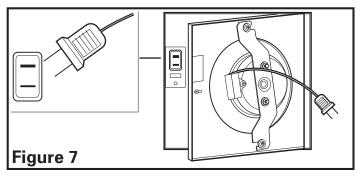
**CAUTION:** ALL ELECTRICAL CONNECTIONS MUST BE MADE IN ACCORDANCE WITH LOCAL CODES, ORDINANCES, OR NATIONAL ELECTRICAL CODE. IF YOU ARE UNFAMILIAR WITH METHODS OF INSTALLING ELECTRICAL WIRING, SECURE THE SERVICES OF A QUALIFIED ELECTRICIAN.

- Run wiring from an approved wall switch carrying the appropriate rating. One neutral (white), one ground (green or bare copper), and one hot (black lead connected to the switch). Secure the electrical wires to the housing with an approved electrical connector. Make sure you leave enough wiring in the box to make the connection to the fan's receptacle.
- From where you have access to inside the fan's junction box, connect the White wire from the house to the White wire from the fan's receptacle. Connect the Black wire from the wall switch to the Black wire from the fan's receptacle. Connect the ground wire from the house to the Green wire from the fan's receptacle (Figure 6). Use approved methods for all connections.

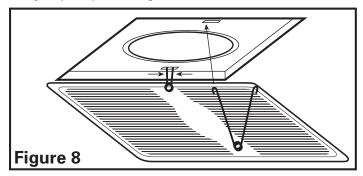


# **SECTION 6**Completing the Installation

 Reinstall the fan's venturi by holding it at approximately a 45 degree angle, hook the two tabs on the venturi into the slots on the housing and secure in place by tightening the venturi screw. Rotate the blower wheel by hand to ensure it spins freely. Now plug the fan motor into the receptacle (Figure 7).



Install the grill by squeezing the two ends of the springs together and installing them up into the slots of the fan's venturi. Push the grill up into position (Figure 8).



3. Restore power and test your installation.

## SECTION 7 Use and Care

# **CAUTION:** MAKE SURE POWER IS SWITCHED OFF AT SERVICE PANEL BEFORE SERVICING THE UNIT.

- Cleaning the Grill: Remove grill and use a mild detergent, such as dishwashing liquid, and dry with a soft cloth. NEVER USE ANY ABRASIVE PADS OR SCOURING POWDERS. Completely dry grill before reinstalling. Refer to instructions in Section 6 Finishing the Installation, to reinstall grill.
- Cleaning the Fan Assembly: Unplug the motor cord from receptacle and loosen the venturi screw to remove the venturi from the unit. Wipe all parts with a dry cloth or gently vacuum the fan. NEVER IMMERSE ELECTRICAL PARTS IN WATER. Refer to instructions in Section 6 Finishing the Installation, to reinstall venturi.

### **Troubleshooting Guide**

Trouble	Probable Cause	Suggested Remedy
1. Fan does not operate when the switch is on.	A fuse may be blown or a circuit tripped.     Connector plug from motor is not plugged in.	Replace fuse or reset circuit breaker.     Turn off power to unit. Remove Grill and plug motor into receptacle in housing. Restore power to unit.
	1c. Wiring is not connected properly.	1c. Turn off power to unit. Check that all wires are connected.
2. Fan is operating, but air moves slower than normal.	Obstruction in the exhaust ducting.	Check for any obstructions in the ducting. The most common are bird nests in the roof cap or wall cap where the fan exhausts to the outside.
3. Fan is operating louder than normal.	3a. Motor is loose.	3a. Turn off power to unit. Remove grill and check that all screws are fully tightened. Restore power to unit.
	3b. Fan blade is hitting housing of unit.	3b. Call your dealer for service.

#### WARRANTY

#### WHAT IS COVERED?

Full Five Year Parts Warranty from date of original proof of purchase. We will provide, free of charge, a replacement part that fails due to manufacturing defect in material or workmanship, when installed and used as directed in the User's Guide

This warranty is extended to the original purchaser for products purchased for ordinary home use.

#### WHAT IS NOT COVERED?

- Installation services or service trips to your home to teach you how to use the product.
- Labor costs or the cost of replacement components as part of routine maintenance.
- Failure or defects in product arising from Improper installation
  If you have an installation problem, contact your dealer or installer. You are
  responsible for providing adequate electrical, exhausting and other connecting
  facilities. See the Installation Instructions provided with this product for
  electrical, exhaust and connection details.
- Replacement of house fuses or resetting of circuit breakers.
- Failure of the product if it is used for something other than the intended purpose of manufacturer or used commercially.
- Damage to the product caused by accident, fire, floods, acts of customer, or acts of God.

This warranty contains the sole and exclusive warranty of GE for claims based on defects in these products. Upon the expiration of the warranty period, all such liability shall terminate. There are no other warranties, whether written, oral, implied or statutory. NO IMPLIED STATUTORY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE SHALL APPLY.

IN NO EVENT SHALL GE BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES, SUCH AS, BUT NOT LIMITED TO, LOSS OF PROFIT OR REVENUES, LOSS OF USE OF THE PRODUCTS OR ANY ASSOCIATED EQUIPMENT, DAMAGE TO ASSOCIATED EQUIPMENT, OR COST OF SUBSTITUTE PRODUCTS.

IN NO EVENT, SHALL GE'S LIABILITY TO BUYER FROM THE SALE OF THESE PRODUCTS EXCEED THE PRICE OF THE DEFECTIVE PRODUCT SOLD AND ANY SUCH LIABILITY SHALL TERMINATE UPON THE EXPIRATION OF THE WARRANTY PERIOD.

#### Read your User's Guide. If you have any questions about operating the product, please contact your dealer.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages and some states do not allow limitations on how long an implied warranty lasts, so these exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state and province to province.

#	Qty.	Description	Replacement Part #
1	1	Fan Housing	5S1299005
2	4	Mounting Rails	5S1299002
3	1	Collar	5S1299003
4	1	Damper	5S1299004
5	1	14 ga Ground Wire	5S1999003
6	1	#10 Ground Screw	5S1999002
7	1	Polarized Receptacle	5S1999001
8	1	Blower Wheel	5S2299004
9	1	Motor	5S2201006
10	1	Motor Bracket	5S2299003
11	2	Hex Nut	5S1999006
12	2	Screw	5S1999012
13	2	Lock Washer	5S1999013
14	1	Motor Plate	5S1201027
15	1	Screw	5S1999011
16	2	Grill Springs	5S1201028
17	1	Grill	5S1201029